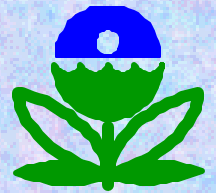


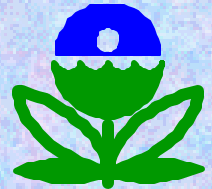
Environmental Protection Agency Section 608 Refrigeration Rules & Regulations



US EPA

Contact Information

- Alice Law, CFC Program Manager
- (913) 551-7623
- law.alice@epa.gov
- www.epa.gov/ozone
- Ozone Hotline
- 800-296-1996
- hotline@tidalwave.net



US EPA

Why All The Trouble?

- Section 608 of the Clean Air Act Amendments of 1990 directed EPA to establish requirements to prevent the release of ozone-depleting substances and their substitutes during the servicing, repair, or disposal of appliances and industrial process refrigeration equipment.

The Prohibition on Venting

- Effective July 1, 1992, Section 608 of the Act prohibits individuals from knowingly venting ozone-depleting compounds used as refrigerants into the atmosphere while maintaining, servicing, repairing, or disposing of air-conditioning or refrigeration equipment (appliances)
- Effective November 15, 1995, the prohibition applies to substitutes

Venting Prohibition (continued)

Exemptions

- De minimis quantities of refrigerant released in the course of making good faith attempts to recapture and recycle or safely dispose of refrigerant
- Refrigerants emitted in the course of normal operation of air-conditioning and refrigeration equipment

Venting Prohibition (continued)

More Exemptions

- Mixtures of nitrogen and R-22 that are used as holding charges or as leak test gases
- Small releases of refrigerant from purging hoses or from connecting or disconnecting hoses

Section 608 Overview

- Require service practices that maximize recycling of ozone-depleting compounds during the servicing and disposal of air-conditioning and refrigeration equipment
- Set certification requirements for recycling and recovery equipment, technicians, and reclaimers

Section 608 Overview

(continued)

- Repair substantial leaks in equipment with a charge of greater than 50 pounds
- Establish safe disposal requirements to ensure removal of refrigerants from goods that enter the waste stream with the charge intact
- Restrict the sale of refrigerant to certified technicians

Definitions

- Appliance
- The Three R's (Recovery, Recycling, Reclamation)
- Opening
- Technician
- Industrial Process Refrigeration

Definitions (continued)

- Retrofit v. Retire
- Commercial refrigeration v. industrial process refrigeration
- System mothballing
- Verification tests

Technician Certification

- Certification is required to perform maintenance, service, repair, or disposal that could be reasonably expected to release refrigerants into the atmosphere.

Technician Certification

(continued)

- The definition of "technician" specifically includes:
- Attaching and detaching hoses and gauges to and from the appliance to measure pressure within the appliance
- Adding refrigerant to or removing refrigerant from the appliance

Technician Certification (continued)

- Technician Certification for Employees
 - Type I - small appliances
 - Type II- high (-12 , -22, -114, -500, -502) or very high pressure (-13, -503) appliances or MVAC-like appliances
 - Type III-low pressure (-11, -113, -123) appliances
 - Universal-low and high pressure appliances
- Apprentices are exempt

Technician Certification (continued)

- Technician Certification Cards
- Kept at place of business
- Specified representative can purchase refrigerant
- After May 15, 1995, no Grandfathering of Certification Cards

Service Requirements

- Technicians must evacuate appliances to established vacuum levels when opening the equipment.
- Evacuation must be done by properly using EPA-certified recovery equipment
- EPA has established evacuation levels
(40 CFR, Part 82, Subpart F)

Service Requirements (continued)

- Owners of appliances that contain 50 or more pounds of refrigerant must keep service records documenting the date and type of service, as well as the quantity of refrigerant added.
- All records (except tech certification) must be maintained for three years.

Service Requirements (continued)

- Owners of equipment with charges of greater than 50 pounds are required to repair leaks in the equipment when all leaks in 30 day period would result in the loss of more than 35% /15% or more of the charge over a year
- Contractors must provide the owner with an invoice that indicates the amount of refrigerant added to the appliance

Myths

- It is okay to vent R-134a.
- Must always reclaim refrigerant.
- EPA keeps record of refrigerant consumption for each company.
- There is no EPA enforcement.